

ABSTRACT

A screen repair apparatus is disclosed for temporarily repairing holes or worn screen elements of screens used in gyratory or vibratory screening machines in the coal mining and rock quarrying industries. The apparatus is comprised of a flat plate which covers the damaged area of screen on the screen's top, a number of duplex jaws which are used to clamp the apparatus to the lower surface of the screen elements, and a clamping means, including an attachment rod which draws together the plate and duplex jaws on either side of the screen elements, thereby clamping the two to the screen. The screen repair apparatus also is comprised of a set of cauls, which are disposed between the clamping means and the upper surface of the plate and which distribute the force exerted by the clamping means across the face of the upper surface of the plate. The clamping means may include an attachment rod which is rigidly attached to the duplex jaw and a nut which engages external threads on the end of the rod opposite the duplex jaw. The clamping means may also include an attachment rod in the form of a bolt which registers with threads within a hole in the duplex jaw and a bolt head which engages the upper surface of the plate. A method is provided for repairing a damaged or worn screen by utilizing and installing the screen repair apparatus disclosed herein.